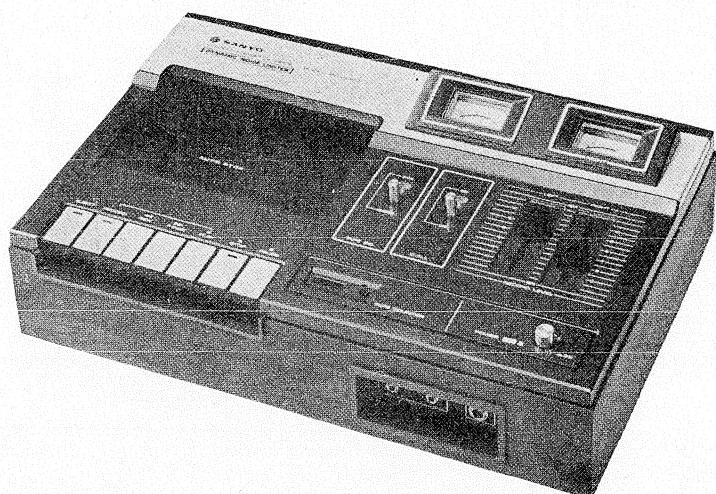




487

SANYO  
CASSETTE TAPE DECK  
RD4055  
RD4055UM  
SERVICE MANUAL



487

## SPECIFICATIONS

Tape:	Chromium dioxide or normal cassette tape
Recording system:	AC bias, 1/4 track stereo
Erasing system:	AC erase, 1/2 track
Tape speed:	1-7/8 ips. (4.75 cm/sec.)
Recording time:	60 min. on double track (C-60)
Rewind & Fast forward time:	1'30" (C-60)
Wow & Flutter:	0.18% RMS
Frequency response:	30 - 16,000 Hz (Chromium dioxide tape) 30 - 13,000 Hz (Normal tape)
Signal to noise ratio:	Dolby N.R. ON: 58 dB Dolby N.R. OFF: 50 dB
Terminal impedance: (Input)	MIC: 10K ohms (0.3 mV) LINE IN: 75K ohms (80 mV)
(Output)	REC/PB: 10K ohms (1 mV) LINE OUT: 5K ohms (500 mV) NOTE : 0 dB = 1V REC/PB: 5K ohms (500 mV) HEADPHONE: 8 - 10K ohms
Power source:	AC: 120/220/240V 50/60Hz (RD 4055) AC: 110/125/220V 50/60Hz (RD 4055UM)
Dimensions:	14-7/32" (W) x 9-7/16" (D) x 4-3/32" (H) (360 x 240 x 104mm)
Weight:	Approx. 6 lbs. 7 oz. (3Kg)

## ADJUSTMENT OF PINCH ROLLER

1. Set the unit to the PLAY mode.
2. Apply a tension gauge to the pinch roller. Read the gauge at the precise moment when the pinch roller separates from the capstan.
3. If the gauge reading is within a range of more than 200 g, no adjustment is necessary. If otherwise, make adjustment by changing the force of the spring coil. (See exploded view No. 23)

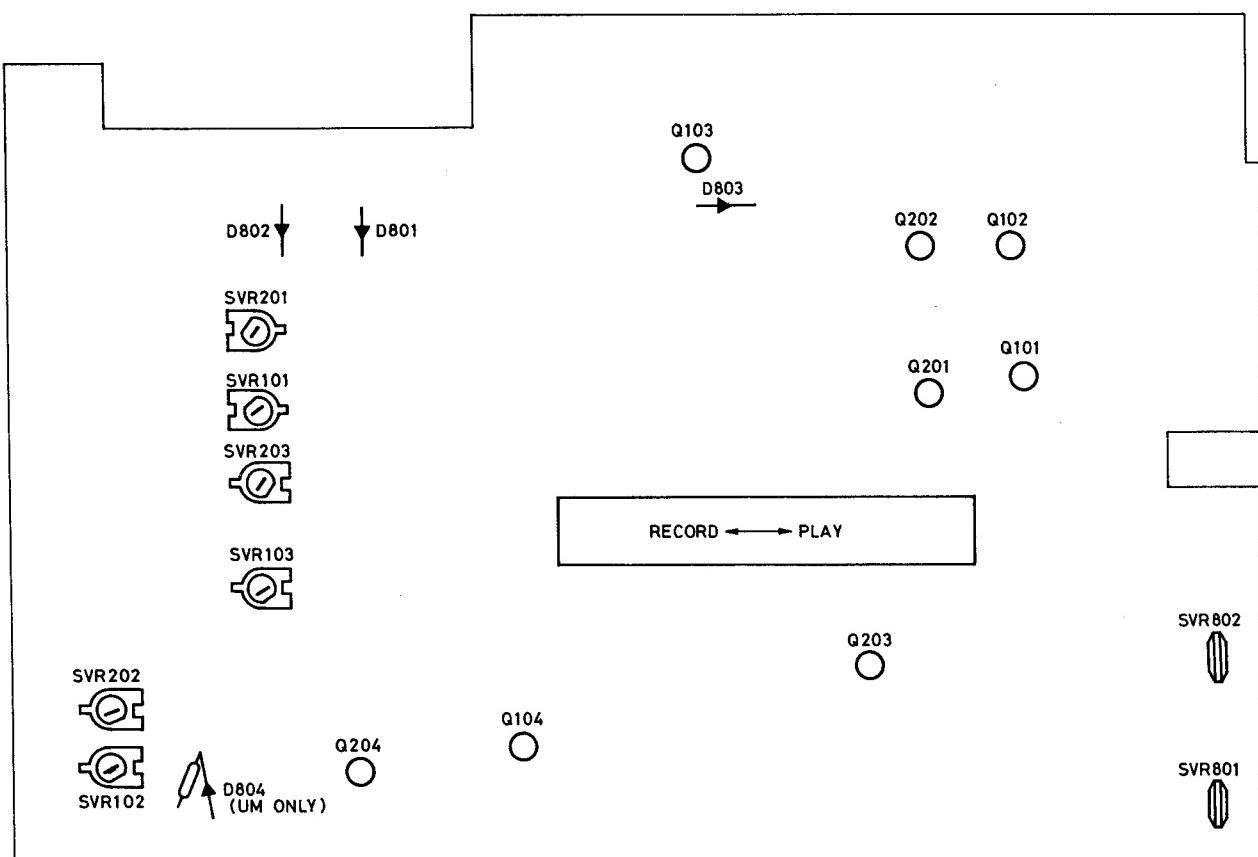
## TORQUE ADJUSTMENT

1. Set the unit to the PLAY, FAST FORWARD or REWIND mode.
  2. Measure the each torque with a torque gauge. They should be as following;
- |              |               |
|--------------|---------------|
| PLAY         | 30 - 60 g/cm  |
| FAST FORWARD | 55 - 110 g/cm |
| REWIND       | 55 - 110 g/cm |
3. If the each torque fails to reach the standard value. Clean the drive belt, flywheel, motor pulley, take-up reel, idler and rewind roller with a cotton swab soaked in alcohol.

## AUTO SHUT-OFF ADJUSTMENT

1. Set the unit to the PLAY mode.
2. Apply a tension gauge to the sensor. Push the gauge and measure the sensor pressure.
3. The sensor pressure should be 30 - 50 g.
4. If a sensor pressure of more than 50 g, or less than 30 g, adjust the spring coil (See exploded view No. 25).

## PARTS LOCATION



## ADJUSTMENT

No.	Using test tape	Test point	Input terminals	Input frequency	Input level	Tape SW position	Dolby SW position	DIN Mic line	REC/PB Volume	Adjustment	Remarks
1	Head azimuth	VTT-658 10kHz -15dB	LINE OUT	-	-	Normal	OFF	-	Max.	Azimuth screw	Adjust azimuth screw to obtain maximum 10kHz output for both L and R channels.
2	Output level	MTT-150 Dolby tape	LINE OUT	-	-	Normal	OFF	-	Max.	SVR101 SVR201	Adjust SVR101 & SVR201 & obtain output of 580mV ±0.5dB at LINE OUT. (Playback volume to max. position.)
3	Meter	MTT-150 Dolby tape	LINE OUT meter	-	-	Normal	OFF	-	Max.	SVR102 SVR202	Meter reading should be within illustrated range after adjusting SVR102 & SVR202 to obtain output of 580mV.
4	Bias (Provisional)	Test tape	Both terminals of R101, R201. (10 ohm)	-	-	Normal	-	-	-	SVR801 SVR802	Identify head base color marks and adjust as follows (Left side for L channel and right side for R channel): purple — 4mV, green — 4.5mV, black — 5mV, red — 5.5mV, blue — 6.5mV, brown — 7mV.
5	Bias (Rec/Play frequency response)	Test tape	LINE OUT	LINE IN 10kHz	-40dB	Normal	OFF	LINE IN	Max.	SVR801 SVR802	Record and play back at bias level adjusted as above. Re-adjust SVR801 & SVR802 to obtain output of 10kHz +2 to +3dB, when frequency response is: 1kHz = 0 dB.
6	Output level	Test tape	LINE OUT	LINE IN 1kHz	-20dB	Normal	OFF	LINE IN	Max.	SVR103 SVR203	Take note of recording monitor output and adjust SVR103 & SVR203 until REC/PLAY output corresponds to recording monitor output. (Difference of REC/PLAY output and monitor output should be less than ±0.5dB.

## PARTS LIST

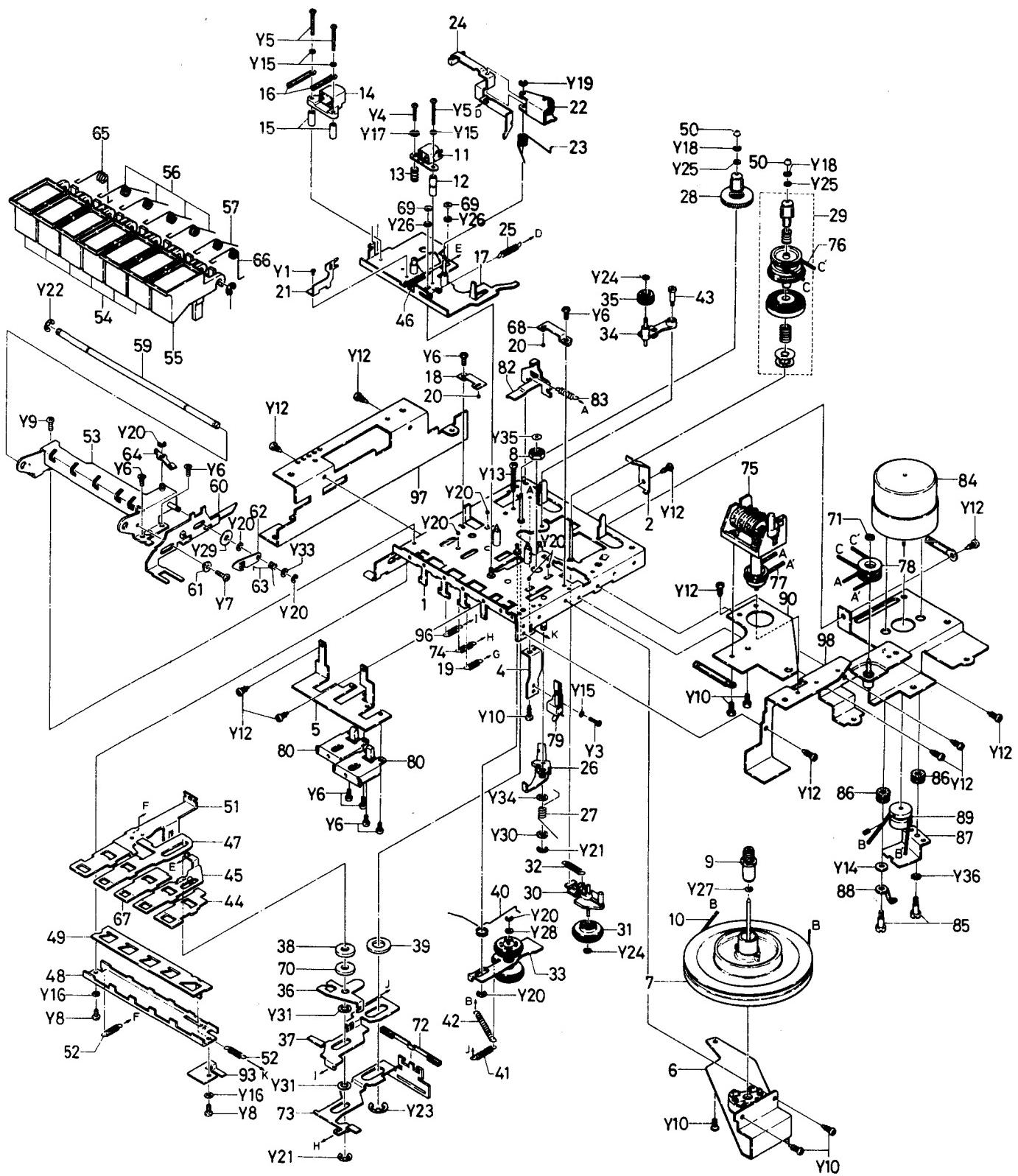
**PARTS LIST**

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty				
<b>AMP P.C.B. ASSY</b>											
C110,210		Electrolytic 33μF 25WV	2	403,409		Electrolytic 0.33μF 16WV	2				
C107,207, 801		Electrolytic 47μF 6.3V	3	C310,410		Mylar 0.0022μF ±20% 50WV	2				
C802		Electrolytic 100μF 25WV	1	C318,418		Mylar 0.0027μF ±10% 50WV	2				
C803		Electrolytic 100μF 16WV	1	C317,417		Mylar 0.0039μF ±20% 50WV	2				
C809,810		Electrolytic 470μF 16WV	2	C316,416		Mylar 0.0047μF ±5% 50WV	2				
C808		Electrolytic 1000μF 25WV	1	C311,411		Mylar 0.0056μF ±5% 50WV	2				
C111,211		Electrolytic 0.33μF 16WV	2	C314,414		Mylar 0.027μF ±5% 50WV	2				
C102,202		Mylar 0.001μF ±10% 50WV	2	C313,413		Mylar 0.047μF ±20% 50WV	2				
C115,215		Mylar 0.0015μF ±10% 50WV	2	C306,406		Ceramic 200pF ±10% 50WV	2				
C105,205		Mylar 0.0068μF ±10% 50WV	2	C315,415		<b>RESISTORS</b>					
C114,214		Mylar 0.027μF ±10% 50WV	2	R302,402		Carbon 120 ohm ±10% 1/4W	2				
C811		Mylar 0.033μF ±20% 50WV	1	R308,408		Carbon 180 ohm ±10% 1/4W	2				
C109,209		Mylar 0.018μF ±10% 50WV	2	R301,401		Carbon 4.7K ohm ±10% 1/4W	2				
C104,204		Ceramic 220pF ±20% 50WV	2	R307,407		Carbon 47K ohm ±10% 1/4W	2				
C806,807		Ceramic 220pF ±10% 50WV	2	R309,409		Carbon 100K ohm ±10% 1/4W	2				
C804,805		Ceramic 330pF ±10% 50WV	2	R305,405		Carbon 150K ohm ±10% 1/4W	2				
C117,217		Ceramic 390pF ±10% 50WV	2	R304,404		Carbon 270K ohm ±10% 1/4W	2				
C116,216		Ceramic 680pF ±10% 50WV	2	R303,403		Carbon 680K ohm ±10% 1/4W	2				
C101,201		Ceramic 820pF ±20% 50WV	2	R306,406		Carbon 3.3K ohm ±10% 1/4W	2				
C118,218		Ceramic 100μF ±20% 50WV	2	<b>METER P.C.B. ASSY</b>							
<b>RESISTORS</b>											
R101,201		Carbon 10 ohm ±10% 1/4W	2	4-226T-79491		Printed circuit board assembly, METER	2				
R805		Carbon 82 ohm ±10% 1/4W	1	4-236T-09600		Plug 6P	2				
R107,120, 207,220, 804		Carbon 220 ohm ±10% 1/4W	5	Q501,502, 601,602		Transistor 2SC536	4				
R121,221		Carbon 560 ohm ±10% 1/4W	2	D501,502, 601,602		Diode 1S188	4				
R132,232 803		Carbon 1K ohm ±10% 1/4W	3	C502,503, 602,603		<b>CAPACITORS</b>					
R116,216		Carbon 1.8K ohm ±10% 1/4W	2	C501,601		Electrolytic 4.7μF 25WV	4				
R110,129, 131,229, 231,210		Carbon 1.2K ohm ±10% 1/4W	6	R504,506, 604,606		Electrolytic 2.2μF 16WV	2				
R115,215		Carbon 2.2K ohm ±10% 1/4W	2	R503,603		<b>RESISTORS</b>					
R122,222		Carbon 3.9K ohm ±10% 1/4W	2	R501,601		Carbon 1K ohm ±10% 1/4W	4				
R123,125, 223,225		Carbon 4.7K ohm ±10% 1/4W	4	R502,602		Carbon 3.3K ohm ±10% 1/4W	2				
R102,118, 202,218		Carbon 5.6K ohm ±10% 1/4W	4	R505,605		Carbon 8.2K ohm ±10% 1/4W	2				
R109,130, 209,230		Carbon 6.8K ohm ±10% 1/4W	4	<b>OSC P.C.B. ASSY</b>							
R124,224		Carbon 8.2K ohm ±10% 1/4W	2	4-226T-79791		Printed circuit board assembly, OSC	1				
R103,104, 203,204		Carbon 10K ohm ±10% 1/4W	4	4-258T-12800		OSC coil	1				
R106,206		Carbon 12K ohm ±10% 1/4W	2	Q701		4-236T-09600	1				
R111,211		Carbon 15K ohm ±10% 1/4W	2	Q702		Plug 6P	1				
R128,228		Carbon 18K ohm ±10% 1/4W	2	<b>CAPACITORS</b>							
R127,227		Carbon 22K ohm ±10% 1/4W	2	C705,706		Electrolytic 220μF 25WV	2				
R112,212		Carbon 27K ohm ±10% 1/4W	2	C707		Electrolytic 220μF 25WV	1				
R119,219, 801		Carbon 47K ohm ±10% 1/4W	3	C704		Electrolytic 220μF 25WV	1				
R114,214		Carbon 56K ohm ±10% 1/4W	2	C701		Mylar 0.0056μF ±10% 50WV	1				
R117,217		Carbon 100K ohm ±10% 1/4W	2	C702,703		Mylar 0.022μF ±20% 50WV	2				
R105,126, 205,226		Carbon 220K ohm ±10% 1/4W	4	<b>RESISTORS</b>							
R108,208		Carbon 330K ohm ±10% 1/4W	2	R702		Carbon 8.2 ohm ±10% 1/4W	1				
R113,213		Carbon 390K ohm ±10% 1/4W	2	R704		Solid 8.2 ohm ±10% 1/2W	1				
<b>DOLBY P.C.B. ASSY</b>											
L301,401	4-226T-79691	Printed circuit board assembly, DOLBY	2	R706		Solid 33 ohm ±10% 1/2W	1				
L302,402	4-252T-02900	Low frequency choke coil 36mH	2	R703		Solid 180 ohm ±10% 1/2W	1				
	4-252T-02800	Low frequency choke coil 23mH Variable	2	R705		Carbon 2.2K ohm ±10% 1/4W	1				
	4-235T-32400	or Socket, IC	2	R701		Carbon 18K ohm ±10% 1/4W	1				
	4-235T-32100	Plug 6P	2	<b>SCREW MOUNTING</b>							
	4-236T-09600	IC NE545B, Dolby IC	2			Pan head screw 2 x 6mm	2				
D301,401	206-5-995T-05452	Zener diode WZ061	2			Pan head screw 3 x 4mm	8				
D302,402		Diode 1S188	2			Pan head screw 3 x 6mm	2				
C304,305, 307,404, 405,407		<b>CAPACITORS</b>	6			Pan head screw 3 x 10mm	2				
C308,312, 408,412		Electrolytic 1μF 25WV	4			Pan head screw 4 x 16mm	6				
C302,402		Electrolytic 10μF 16WV	2			Tapping screw 2.3 x 6mm	1				
C301,401		Electrolytic 47μF 16WV	2			Tapping screw 3 x 6mm	5				
C303,309,		Electrolytic 100μF 16WV	2			Tapping screw 3 x 8mm	2				
		Electrolytic 0.1μF 16WV	4			Tapping screw 3 x 35mm	2				

PARTS LIST

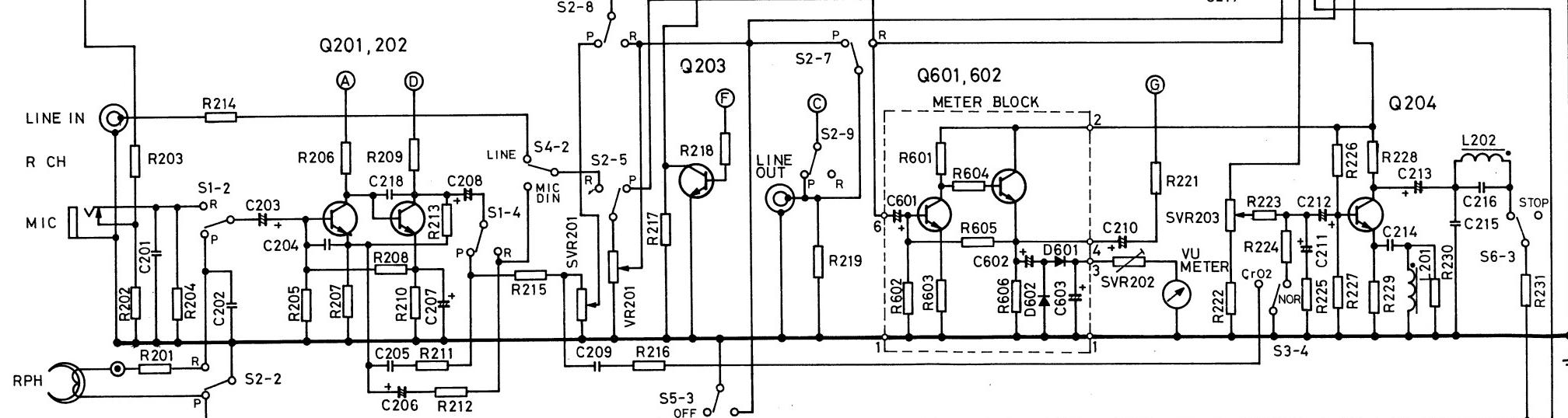
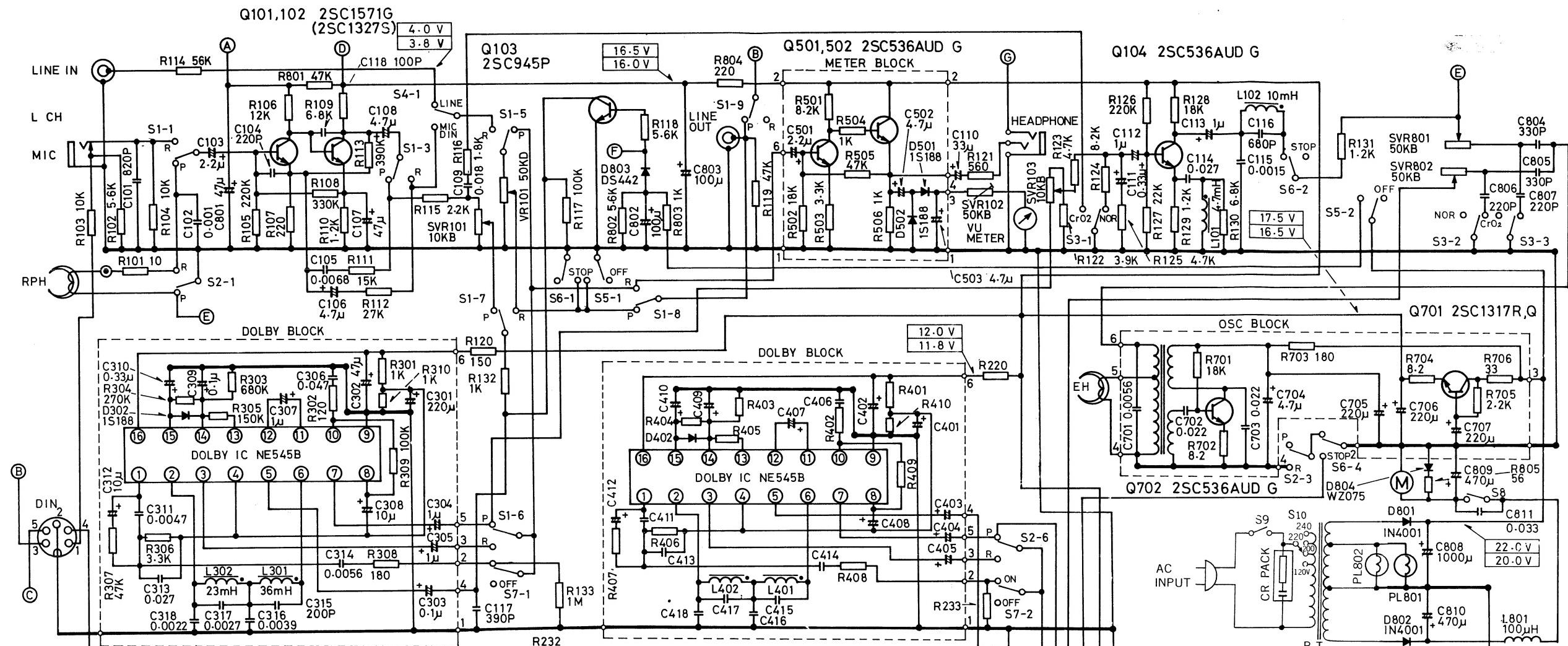
Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
SCREW MOUNTING							
		Washer 3.3 x 13 x 1mm Washer 4.5 x 10 x 0.8mm External tooth lock washer 3mm External "E" ring 2mm Pan head screw with spring washer 3 x 8mm Pan head screw with washer & spring washer 3 x 4mm Pan head screw with washer & spring washer 3 x 8mm Tapping screw with washer 3 x 10mm Tapping screw with washer 3 x 12mm	1 4 1 1 2 1 2 5 6	67	141-2-731T-26600	Slide, F.FWD button	1
MECHANISM							
1	141-0-311T-01903	Chassis	1	68	141-2-853T-38700	Plate spring, Head slide pressure	1
2	141-2-853T-33300	Plate spring, Cassette Pressure	1	69	141-2-457T-04100	Special washer, Head slide pressure	2
3	123-2-472R-00600	Lug	1	70	141-2-457T-08100	Special washer, Spacer	1
4	141-2-365T-22600	Bracket, Power supply switch mtg.	1	71	141-2-457T-04100	Special washer, Counter relay	1
5	141-2-365T-26100	Bracket, Muting switch mtg.	1	72	141-0-713T-00100	Brake plate spring assembly	1
6	141-0-524T-06191	Bracket assembly, Flywheel mtg.	1	73	141-2-731T-26901	Main slide	1
7	141-0-521T-05100	Flywheel assembly	1	74	141-2-851T-73500	Coil spring, Main slide returning	1
8	141-2-411T-02601	Plate nut, Bearing mtg.	1	75	141-2-811T-04000	Counter	1
9	141-0-573T-01000	Bearing assembly, Flywheel	1	76	141-2-564T-13300	Square belt, Reel plate to relay pulley S	1
10	141-2-564T-14700	Square belt, Flywheel drive	1	77	141-2-564T-13400	Square belt, Relay pulley to Counter L	1
11	4-242T-19200	R/P head	1	78	141-2-661T-16601	Pulley, Counter relay	1
12	141-2-461T-19300	Pipe, R/P head mtg.	1	79	4-231T-42600	Power supply switch	1
13	141-2-851T-54500	Coil spring	1	80	4-231T-43000	Muting switch	2
14	4-242T-13600	E head	1	82	141-2-741T-60800	Lever, Unti miss recording	1
15	141-2-461T-19200	Pipe, E head mtg.	2	83	141-2-851T-56100	Coil spring, Lever (82) mtg.	1
16	141-2-472T-02200	Lug, E head earth mtg.	2	84	4-527T-06600	DC motor	1
17	141-0-731T-06300	Slide assembly, Head slide	1	85	141-2-421T-08300	Special screw, Motor mtg.	2
18	141-2-853T-27800	Coil spring, Slide (17) pressure	1	86	141-2-445T-13300	Rubber cushion, Motor mtg.	2
19	141-2-851T-71800	Coil spring, Slide (17) returning	1	87	141-2-322T-19200	Shield plate	1
20		Stell ball 2mm, Head slide Plate spring	6	88	141-2-472T-03700	Lug, Motor mtg.	1
21	141-2-821T-09500	Tape guide	1	89	141-0-661T-69491	Motor pulley assembly	1
22	141-0-545T-01000	Pinch roller lever assembly	1	90	141-2-812T-05100	Bracket, Counter mtg.	1
23	141-2-851T-71700	Coil spring, Pinch roller pressure	1	93	141-2-747T-07800	Bracket, Lock slide	1
24	141-0-721T-00900	Lever shut off assembly, Auto stop	1	96	141-2-851T-73700	Coil spring, Slide (37) returning	1
25	141-2-851T-91000	Coil spring, Auto stop	1	97	141-2-316T-08800	Chassis mounting, Right	1
26	141-2-741T-60700	Lever Quick lever	1	98	141-0-316T-00100	Chassis mounting assembly, Left	1
27	141-2-851T-72200	Coil spring, Quick lever	1				
28	141-0-531T-02300	Reel plate assembly, Supply reel	1				
29	141-0-531T-02400	Reel plate assembly, Take up reel	1				
30	141-0-731T-06000	Slide assembly, Play idler mtg.	1				
31	141-2-551T-02100	Play idler	1				
32	141-2-851T-73700	Coil spring, Pulley pressure	1				
33	141-0-551T-00800	Idler assembly, REW & FWD roller	1				
34	141-0-741T-09800	Lever assembly, FWD lever	1				
35	141-2-551T-02000	Idler, REW roller	1				
36	141-2-741T-60500	Lever, REW operation	1				
37	141-2-731T-26801	Slide, F.FWD operation	1				
38	141-2-457T-07800	Special washer, Spacer	1				
39	141-2-457T-07900	Special washer, Spacer	1				
40	141-2-851T-72000	Coil spring, F.FWD operation	1				
41	141-2-851T-73300	Coil spring, Idler (33) returning	1				
42	141-2-851T-73900	Coil spring, Idler (33) returning	1				
43	141-2-421T-13500	Special screw, REW lever (34) fulcrum	1				
44	141-2-731T-27000	Slide, STOP button	1				
45	141-2-731T-26400	Slide, PLAY button	1				
46	141-2-851T-73800	Coil spring, Slide (45) returning	1				
47	141-2-731T-26500	Slide, REW button	1				
48	141-2-673T-03100	Slide cam, Slide mtg.	1				
49	141-2-614T-04801	Lever, Lock slide	1				
50	141-2-536T-01700	Fix reel plate, Reel cap	2				
51	141-2-731T-27101	Slide, REC button	1				
52	141-2-851T-73600	Coil spring, Lock slide returning	1				
53	141-0-613T-00100	Flame assembly, Push button mtg.	1				
54	141-2-611T-06900	Lever, Push button	6				
55	141-2-611T-07100	Lever, Pause button	1				
56	141-2-851T-71300	Coil spring, Push button returning	4				
57	141-2-851T-71400	Coil spring, Stop button returning	1				
59	141-2-612T-03300	Shaft, Push button	1				
60	141-0-652T-00101	Slide assembly, PAUSE	1				
61	141-2-462T-24600	Boss	1				
62	141-2-671T-04100	Cam, Lock lever	1				
63	141-2-851T-72300	Coil spring, Lever returning	1				
64	141-2-651T-01300	Lever, PAUSE	1				
65	141-2-851T-71500	Coil spring, Eject returning	1				
66	141-2-851T-71600	Coil spring, Pause returning	1				

**EXPLODED VIEW**



**MEMO** \_\_\_\_\_

SCHEMATIC DIAGRAM



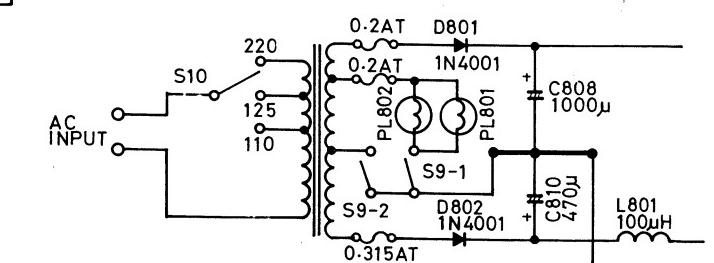
	Q101 201	Q102 202	Q103 203	Q104 204	Q501 601	Q502 602	Q701	Q702
E	PLAY 0.01 V	1.5 V	0 V	1.0 V	2.0 V	10.4 V	17.7 V	
	RECORD 0.01 V	1.4 V	0 V	1.8 V	9.4 V	16.7 V	0.1 V	
B	PLAY 0.6 V	2.2 V	0.6 V	1.6 V	2.6 V	11.0 V	18.3 V	
	RECORD 0.6 V	2.0 V	0.6 V	1.6 V	2.4 V	10.0 V	17.2 V	
C	PLAY 2.2 V	7.0 V	0 V		11.0 V	17.5 V	19.0 V	
	RECORD 2.0 V	6.8 V	0 V	3.0 V	10.0 V	16.5 V	20.5 V	16.0 V

PLAY TO CHASSIS RECORD

RD4055 AS

- S1-1-S1-9 TAPE SELECT SWITCH
- S2-1-S2-9 LINE IN/DIN MIC SWITCH
- S3 PLAY SWITCH (OFF AT PLAY)
- S4 STOP SWITCH
- S5 DOLBY N-R ON-OFF SWITCH
- S6 MOTOR SWITCH
- S7 POWER SWITCH
- S8 VOLTAGE SELECT SWITCH
- S9 S10

2SC536 2SC1571 2SC1327



WIRING DIAGRAM

